



Impact 4: Latitude: 35.2574 Longitude: -89.8724  
Unnamed tributary to Loosahatchie River (STR2) Station 130+25.13+/-

Existing 52' of 64" RCP and 210' of open stream would be replaced with 175' of 72" RCP with 56' of riprap at the outlet resulting in a loss of 31' of stream length.

#### **MITIGATION REQUIRED**

As mitigation for 408 ft. of encapsulation, 44 ft. of length loss and 96 ft. (128' X0.75) of riprap TDOT proposes to purchase 548 credits from the Tennessee Stream Mitigation Program. Temporary impacts to wetlands would be mitigated by stockpiling topsoil for replacement upon completion and returning the affected area to original elevation and planting/seeding with wetland seed stock.

**DEGRADATION:** In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the division has determined that the proposed activities will not result in degradation to water quality.

**WATERSHED / WATERBODY DESCRIPTION:** The unnamed tributaries impacted by this project flow into the Loosahatchie River Watershed which is located in West Tennessee and includes parts of Fayette, Hardeman, Haywood, Shelby and Tipton counties. It is approximately 738 square miles and drains to the Mississippi River. For more information on this watershed please visit <http://www.state.tn.us/environment/water/watersheds/lower-tennessee-river.shtml>

Loosahatchie River TN08010209001\_1000 is in the Loess Plains ecoregion (73a & 74b). The channel dimensions of the impacted tributary are as follows: channel bottom width 2-4', channel top width 6-9', water depth 0", and bank height 6" to 3'. Typical substrate in this section is comprised of silty clay. The banks are well vegetated with black willow and elm. Surrounding land use is rural agricultural.

These tributaries to the Loosahatchie were assessed in 2006. They are not supporting in all designated uses. The specific use that is not meeting use support and the cause is as follows: Fish and Aquatic life due to phosphorous and intermittent flow. Therefore the stream is available for additional impacts to habitat.

**Stream Name / ID #:** Loosahatchie River TN08010209001\_1000

**Ecoregion:** Loess Plains ecoregion (73a & 74b)

**Stream Dimension:** Channel bottom width 2-4'  
Chanel top width 6-9'  
Water depth 0"  
Bank height 6" – 3'

**Substrate:** silty clay

<b>Designated Use</b>	<b>Use Support</b>	<b>Causes</b>
Fish and aquatic life	not supporting	phosphorous
Recreation	not supporting	
Industrial water supply	fully supporting	
Irrigation	fully supporting	
Livestock watering & wildlife	fully supporting	

This stream is available for additional impacts to habitat.

**Assessment Date:** 2006

**PERMIT COORDINATOR:** Brian Canada

**FACTORS CONSIDERED:** In deciding whether to issue or deny a permit, the department will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The department shall consider practicable alternatives to the alteration. The department shall also consider loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impact to unique, high quality, or impaired waters.

**COMMENTING:** Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced. Send all written comments to the department's address listed below and to the attention of the permit coordinator.

**PUBLIC HEARING:** Interested persons may request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing. Send all public hearing request to the department's address listed below and to the attention of the permit coordinator.

**APPEAL:** A permit appeal may be filed, pursuant to T.C.A. §§ 69-3-105(i) and Rule 0400-40-05, by the permit applicant or by any aggrieved person who participated in the public comment period announced by this notice. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Dr. Sandra Dudley, Director, Division of Water Resources, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave, 12<sup>th</sup> floor, Nashville, TN 37243. Any hearing would be in accordance with T.C.A. §§69-3-110 and 4-5-301 et seq.

**FILE REVIEW:** The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address (listed below) for review and/or copying.

Tennessee Department of Environment & Conservation  
Division of Water Resources, Natural Resources Unit  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243



Shelby County, SR-14 from Singleton Pkwy (SR-204) to Paul Barrett Pkwy (SR-385)  
 PE: 79022-1225-04  
 PIN: 101608.00  
 Sheet 2 of 10

PND = Pond or Quarry  
 STR = Stream or Waterway Structure  
 WWC = Wet Weather Conveyance



Shelby County, SR-14 from Singleton Pkwy (SR-204) to Paul Barrett Pkwy (SR-385)  
 PE: 79022-1225-04  
 PIN: 101608.00  
 Sheet 3 of 10

WTL = Wet Weather  
 WWC = Wet Weather Conveyance





Shelby County, SR-14 from Singleton Pkwy (SR-204) to Paul Barrett Pkwy (SR-386)  
PE: 79022-1225-04  
PNT: 101608.50  
Sheet 4 of 10

STR-2 Intersect at Intersected Street  
WWC = Wet Weather Conveyance



